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Abstract:

There is proposed a tool with a tool body and a wear resistant layer system, which layer system comprises at least one layer of MeX. Me comprises titanium and aluminum and X is nitrogen or carbon. The tool has a tool body of high speed steel (HSS) or of cemented carbide, but it is not a solid carbide end mill and not a solid carbide ball nose mill. In the MeX layer the quotient Q, as defined by the ratio of the diffraction intensity I(200) to I(111) assigned respectively to the (200) and (111) plains in the X ray diffraction of the material using θ -2 θ method is selected to be ≥ 1 . Further, the I(200) is at least twenty times larger than the intensity average noise value, both measured with a well-defined equipment and setting thereof.